

Form PTO-1449

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Atty. Docket No.
54205A-PCT-US
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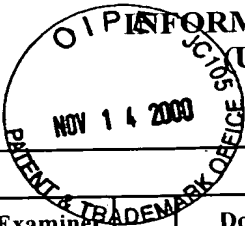
Serial No.
09/630,215

NOV 17 2000

Applicants
John O'Connor et al.

Filing Date
August 1, 2000

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Group
1641



U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate	
						Yes	No
gog	US 4 5 1 4 5 0 5	4/30/85	Canfield et al.				
gog	US 5 2 6 0 4 2 1	11/9/93	Chappel et al.				

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Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No
gog WO 9 9 4 1 5 8 4	8/19/99	PCT			✓	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

gog	Bogart et al., (1989) "Human Chorionic Gonadotropin Levels in Pregnancies with Aneuploid Fetuses", <u>Prenat.Diagn.</u> 9: 379-384;
gog	Bogart et al., (1987) "Abnormal Maternal Serum Chorionic Gonadotropin Levels in Pregnancies with Fetal Chromosome Abnormalities", <u>Prenat.Diagn.</u> 7: 623-630;
gog	Cole et al., (1997) "Oligosaccharide Variants of hCG-related Molecules: Potential Screening Markers for Down Syndrome", <u>Prenat.Diagn.</u> 17: 1188-1190;
gog	Cole et al., (1998) "Hyperglycosylated hCG, A Potential Alternative To hCG in Down Syndrome Screening", <u>Prenat.Diagn.</u> 18: 926-933;

EXAMINER *Brigitte B. Dahl* DATE CONSIDERED *9/1/02*

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Applicant: John O'Connor, et al.
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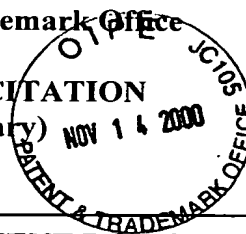
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88	Cole et al., (1997) "Urine β -Core Fragment, a Potential Screening Test for Ectopic Pregnancy and Spontaneous Abortion", <u>Fetal.Diagn.Ther.</u> 12: 336-339;
88	Forest et al., (1995) "Screening for Down Syndrome During the First and Second Trimesters: Impact of Risk Estimation Parameters", <u>Clin.Biochem.</u> 28: 443-449;
88	Kovalevskaya et al., (1999) "Early Pregnancy Human Chorionic Gonadotropin (hCG) Isoforms Measured By An Immunometric Assay For Choriocarcinoma-like hCG", <u>J.Endocrinol.</u> 161: 99-106;
88	Spencer et al., (1996) "Urine Free beta-hCG and Beta Core in Pregnancies Affected by Down's Syndrome", <u>Prenat.Diagn.</u> 16: 605-613;

EXAMINER *Daniel H. Bell* DATE CONSIDERED 5/1/02

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SS	Spencer et al., (1993) "Stability of Intact Chorionic Gonadotropin (hCG) in Serum, Liquid Whole Blood, and Dried Whole-Blood Filter-Paper Spots: Impact on Screening for Down Syndrome by Measurement of Free β -hCG Subunit", <u>Clin.Chem.</u> 39: 1064-1068;
SS	Spencer et al., (1997) "Biochemical Markers of Trisomy 21 in Amniotic Fluid", <u>Prenat.Diagn.</u> 17: 31-37;
SS	Valerio et al., (1996) "Maternal Serum Screening of Fetal Chromosomal Abnormalities by AFP, UE3, hCG and free- β hCG", <u>Minerva.Ginecol.</u> 48: 169-173;
SS	Wald et al.,(1994) "Four-Marker Serum Screening For Down's Syndrome", <u>Prenat.Diagn.</u> 14: 707-716;

EXAMINER: *Dorlene B. Gabel* DATE CONSIDERED: *5/1/02*

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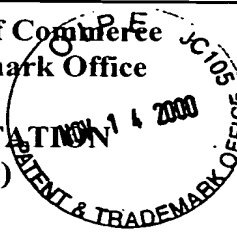
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John O'Connor et al.

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	Wald et al., (1994) "First Trimester Biochemical Screening for Down's Syndrome", <u>Ann.Med.</u> 26: 23-29;
	Zimmermann et al., (1996) "Age-Independent Indices in Second-Trimester Serum Screening for Down's Syndrome Are Useless", <u>Prenat.Diagn.</u> 16: 79-82;
	Birken et al., (1993) "Separation of Nicked Human Chorionic Gonadotropin (hCG), Intact hCG, and hCG Beta Fragment From Standard Reference Preparations and Raw Urine Samples", <u>Endocrinology</u> 133: 1390-1397;
	Birken et al., (1996) "Metabolism of hCG and hLH to Multiple Urinary Forms", <u>Mol. Cell Endocrinol.</u> 125: 121-131;

EXAMINER <i>Andrew B. Sobel</i>	DATE CONSIDERED 5/1/02
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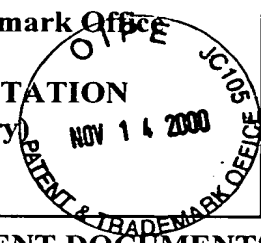
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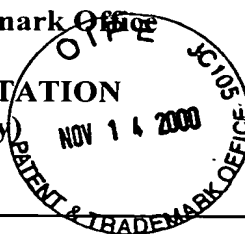
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88	Cole et al., (1993) "The Deactivation of hCG by Nicking and Dissociation", <u>J.Clin.Endocrinol.Metab.</u> 76: 704-710;
86	Cole et al., (1985) "The Structures of the Serine-linked Sugar Chains on Human Chorionic Gonadotropin", <u>Biochem.Biophys.Res.Commun.</u> 126: 333-339;
88	Ellish et al., (1996) "A Prospective Study of Early Pregnancy Loss", <u>Hum.Reprod.</u> 11: 406-412;

EXAMINER *Shilow B. Gabel* DATE CONSIDERED *5/1/02*

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<i>JS</i>		Hoermann et al., (1994) "Immunological Recognition and Clinical Significance of Nicked Human Chorionic Gonadotropin in Testicular Cancer", <u>Clin.Chem.</u> 40: 2306-2312;
<i>JS</i>		Kovalevskaya et al., (1995) "HLH Beta Core Fragment Immunoreactivity in the Urine of Ovulating Women: A Sensitive and Specific Immunometric Assay for its Detection", <u>Endocrine</u> 3: 881-887;
<i>JS</i>		O'Connor et al., (1994) "Recent Advances in the Chemistry and Immunochemistry of Human Chorionic Gonadotropin: Impact on Clinical Measurements", <u>Endocr.Rev.</u> 15: 650-683;
<i>JS</i>		O'Connor et al., (1998) "Differential Urinary Gonadotropin Profiles in Early Pregnancy and Early Pregnancy Loss", <u>Prenat.Diagn.</u> 18: 1232-1240;

EXAMINER <i>Enilene B. Gosh</i>	DATE CONSIDERED 5/1/02
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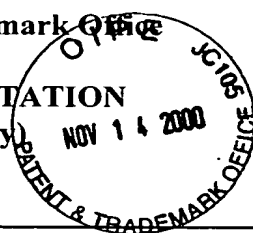
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88	O'Connor et al., (1988) "Development of Highly Sensitive Immunoassays to Measure Human Chorionic Gonadotropin, its Beta-subunit, and Beta Core Fragment in the Urine: Application to Malignancies", <u>Cancer Res.</u> 48: 1361-1366;
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88	Zinaman et al., (1996) "Estimates of Human Fertility and Pregnancy Loss", <u>Fertil.Steril.</u> 65: 503-509;
88	Acevedo et al., (1992) "Expression of Membrane-associated Human Chorionic Gonadotropin, Its Subunits, and Fragments by Cultured Human Cancer Cells", <u>Cancer</u> 69(7): 1829-1842;

EXAMINER *Priscilla R. Zabel* DATE CONSIDERED *5/1/02*

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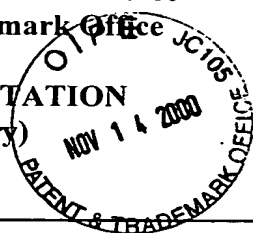
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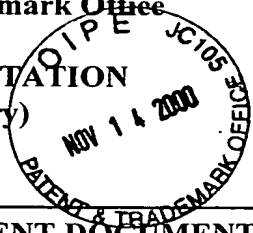
JS	Berger et al., (1993) "Variants of Human Chorionic Gonadotropin from Pregnant Women and Tumor Patients Recognized by Monoclonal Antibodies", <u>J. Clin. Endocrinol. and Metabolism</u> 77(2): 347-351;
JS	Birken et al., (1999) "Development and Characterization of Chorionic Gonadotropin in Serum and Urine from Patients with Trophoblastic Tumors", <u>Clinical Investigation</u> 71: 953-960;
JS	Cole et al., (1991) "The Heterogeneity of Human Chorionic Gonadotropin (hCG). III. The Occurrence and Biological and Immunological Activities of Nicked hCG", <u>Endocrinology</u> 129(3): 1559-1567;
JS	Hoermann et al., (1993) "Molecular Heterogeneity of Human Chorionic Gonadotropin in Serum and Urine from Patients with Trophoblastic Tumors", <u>Clinical Investigation</u> 71: 953-960;

EXAMINER
Britten B. Goh

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	Applicants John O'Connor et al.	
	Filing Date August 1, 2000	Publication Number 1641



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88	Birken et al., (1993) "Separation of Nicked Human Chorionic Gonadotropin (hCG), Intact hCG, and hCGβ Fragment from Standard Reference Preparations and Raw Urine Samples", <u>Endocrinology</u> 133(3): 1390-1397;
88	Ellish et al., (1996) "A Prospective Study of Early Pregnancy Loss", <u>Human Reproduction</u> 11(2): 407-408;
88	Hoermann et al., (1994) "Immunological Recognition and Clinical Significance of Nicked Human Chorionic Gonadotropin in Testicular Cancer" <u>Clinical Chemistry</u> 40(12): 2306-2312;

EXAMINER: *Erin E. Gabriel* DATE CONSIDERED: *5/1/02*

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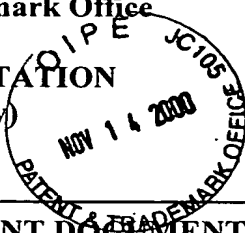
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88	Knight, (1989) "The Carbohydrate Frontier", <u>Biotechnology</u> 7(1): 35 and 39-40;
88	O'Connor et al., (1988) "Development of Highly Sensitive Immunoassays to Measure Human Chorionic Gonadotropin, Its β -subunit, and Core Fragment in Urine: Application to Malignancies", <u>Cancer Research</u> 38: 1361-1366;

EXAMINER Dr. Lawrence B. Gabriel DATE CONSIDERED 5/1/12

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